

Abstract for Jamie Elsila Cook

“Astrobiology and the Chemistry of the Early Solar System”

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The field of astrochemistry investigates the origin of the chemicals necessary for the formation of life. Astrochemists use remote observations, laboratory simulations, and analysis of extraterrestrial samples to understand the inventory of prebiotic chemicals present on the early Earth. Among the problems investigated by astrochemists is the origin of homochirality in terrestrial life. Analysis of meteorites shows that they may have delivered an excess of L-amino acids to the Earth's surface, perhaps leading to homochirality.